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TECHNICAL MEMORANDUM
FUTURE LAND USE SCENARIOS
FOR THE
CENTRAL FACILITIES AREA
IDAHO NATIONAL ENGINEERING LABORATORY
JULY 1, 1992

1. INTRODUCTION

The INEL Federal Facilities Agreement and Consent Order (FAA/CO) Project Managers determined that a technical memorandum should be prepared to provide information for selecting reasonable future land use scenarios to be used in preparing risk assessments for the Central Facilities Area (CFA), Waste Area Group (WAG) 4. This memorandum provides information on planned land use for areas surrounding the INEL, soil survey information and INEL planning information required to develop reasonable future use scenarios for CFA.

2. LAND USE PLANS SURROUNDING INEL

The INEL is located in Bonneville, Jefferson, Butte, and Bingham Counties as show on Figure 1. The following organizations were contacted regarding their use plans for land surrounding the INEL site:

- U. S. Forest Service
- Idaho Department of Fish and Game
- Idaho Department of Lands
- Idaho Crop Improvement Association
- U. S. Department of Agriculture
- U. S. Fish and Wildlife Service
- Idaho Cattlemen's Association
- University of Idaho Experimental Sheep Station
- Idaho Historical Preservation Society
- Bonneville County Planning and Zoning
- Jefferson County Planning and Zoning
- Bingham County Planning and Zoning
- U. S. Bureau of Land Management

This Technical Memorandum summarizes information gathered from these organizations. Detailed information can be found in Appendix A. Some recreational hunting is allowed up to one-half mile inside the INEL site boundary. The only other non industrial use of the INEL site is grazing. There is no irrigation or crop production. A portion of the INEL located within Bonneville County is classified by the Soil Conservation Service as agricultural which means the land is suitable for grazing, livestock, dairying, pasturage or animal husbandry. In Bonneville county, there is little residential or farm potential around the boundary and consequently little prospect for growth. In Jefferson County, the Federally controlled land is classified and managed by the Bureau of Land Management and used as rangeland or barren land. The areas in Jefferson County adjacent to the east INEL site boundary consist of agricultural cropland and rangeland. In Bingham County, the area south of the INEL site is classified as natural, where land and/or water is in a natural unimproved state. This classification may include mineral deposits, timber, rangeland, watersheds, recreation areas and wildlife habitat. In Butte County, the area adjacent to the west INEL site boundary is controlled by the U. S. Bureau of Land Management and is used for rangeland.

3. SOIL SURVEY INFORMATION

Soil surveys have been prepared for Bonneville, Jefferson, and Clark Counties. The Butte County soil survey is currently being prepared. In Bonneville County, the majority of the area is categorized as the Pantheri-Polatis soil unit according to general soil-use maps. This soil unit is suited for irrigated crops and urban development. However, urban development would be somewhat limited, and agriculture is significantly limited by rock outcrops. Jefferson County has three general soil units. Two of the soil units are in the northern portion of the INEL site and have agricultural potential if irrigated. The third soil unit is comprised of rock outcrops (lava beds) and could be used for range, wildlife habitat, and recreation. No potential urban uses were identified. Clark County has two major soil units. The Allhands-Fallert soil unit is suitable for agriculture with moderate difficulty; The Whiteknob-Gravelly loam unit is suitable for agriculture with irrigation. Soils in the vicinity of CFA are shallow and poorly developed, as is typical of soils in the southern portions of the INEL. Soils in the vicinity of CFA are composed of windblown (eolian) sediments exhibiting a sandy loam or loam composition and some alluvial deposits near the Big Lost River floodplain.

4. SITE PLANNING FOR THE CENTRAL FACILITIES AREA

CFA currently is the workplace for approximately 1200 people at the INEL. The Central Facilities Area is expected to experience slight growth in the next two to five years. Growth over the next 20 years is dependent on INEL programmatic changes. The CFA area provides support functions, program and support services capabilities and facilities such as; landfills, warehousing, craft shops, research laboratories, and administrative offices. The CFA's centralized service capabilities and facilities support research and development personnel located throughout the INEL and are expected to remain active as long as operations continue at the INEL.

5. SITE PLANNING FOR THE INEL

The future use of the INEL is being reviewed at this time. Possible future projects include the reconfiguration of the Nuclear Weapons Complex and the siting of the New Production Reactor. The reconfiguration of the Nuclear Weapons Complex could result in relocating some facilities to the INEL. The siting of these facilities would result in public use restrictions well into the next century.

Another possible siting at the INEL is the New Production Reactor (NPR). The final decision has not been made on the location of this facility. Whether or not these facilities are sited at the INEL, long-range planning indicates that the INEL will continue to operate into the foreseeable future.

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ARA Auxiliary Reactor Area
ANL Argonne National Laboratory-West
C Central Facilities Area
EBR-I Experimental Breeder Reactor I
EBR-II Experimental Breeder Reactor II
ICPP Idaho Chemical Processing Plant
IET Initial Engine Test
LOFT Loss-of-Fluid Test (Facility)
NRF Naval Reactor Facility
PBF Power Burst Facility
RWMC Radioactive Waste Management Complex
STF Security Training Facility
TAN Test Area North
TRA Test Reactor Area
TREAT Transient Reactor Test (Facility)
TSF Technical Support Facility
WMO Waste Management Office
WRRTF Water Reactor Research Test Facility

• National Historic Landmark

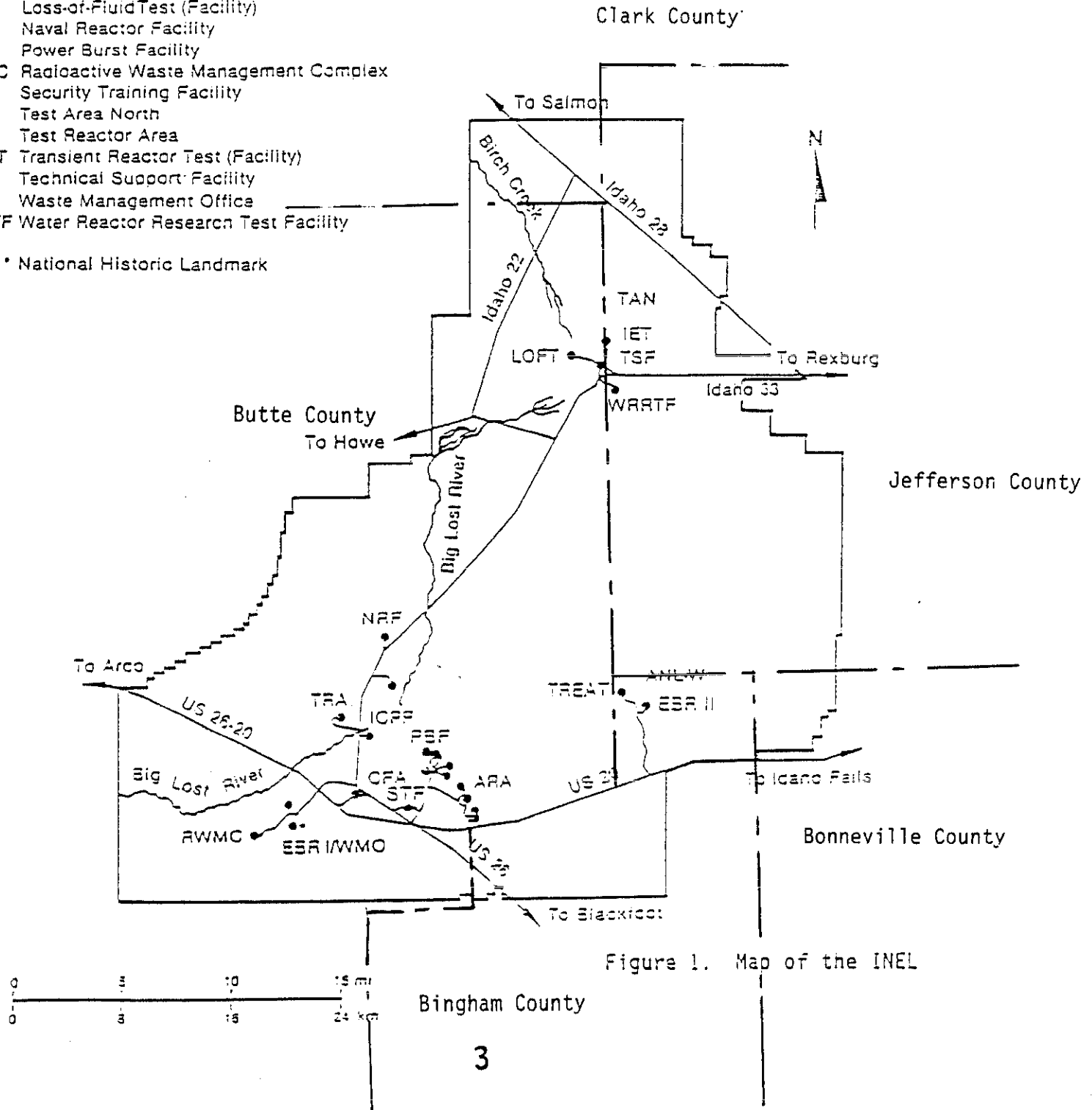


Figure 1. Map of the INEL

6. PRESENT AND FUTURE LAND USE

6.1 Present Land Use

The population closest to CFA includes ranchers and farmers located on land adjacent to the INEL site boundary. The INEL consists of 890 square miles of Federally-owned land that has been withdrawn from public use. There are no residents at the CFA area. The nearest permanent residents live in Atomic City (approximately 35 residents located 10 miles southeast of CFA). Other population centers in the vicinity include Idaho Falls (approximately 43,000 residents located 40 miles to the east of CFA); Blackfoot (approximately 10,000 residents located 42 miles to the southeast of CFA); and Arco (approximately 1,000 residents located 30 miles to the west of CFA). Fall hunting activities occur one-half mile inside the INEL site boundary (approximately seven miles from CFA). Livestock grazing is permitted in designated areas near the perimeter of the INEL site. Herdsmen are likely to be present in the east and south grazing areas during the winter months and to the west the rest of the year. Hunting and grazing activities are not permitted in the CFA area.

6.2 Future Land Use

The current industrial land use will continue for the foreseeable future based on currently available information. Should land use change in the future after INEL operations cease, the expected land use scenario would be residential-agriculture/livestock grazing with full-time residents possible at CFA. The residential scenario is possible because it is compatible with current land use, climate, existing agricultural economy, soils in the area, and because water would be available from the Snake River Plain Aquifer. Future urban residential use would be unlikely because the INEL is located in a rural area with a low population density and low projected growth. Future recreational use could consist of activities such as hunting, camping, hiking, and other outdoor activities.

7. TIME FRAME SCENARIOS

The CFA Area has planned activities which include facility upgrades and building replacements. Long range plans are associated with the future needs of other INEL programs. Soils at CFA and the availability of water from the Snake River Plain Aquifer provide potential for agriculture and residential activities. However, based on currently available planning and known current land use on and around the INEL, a change in land use would not be expected to occur at CFA until well into the next century.

Therefore, the most reasonable land use scenario for CFA in the near term is INEL industrial followed by potential residential agricultural use in the future if INEL operations cease.

APPENDIX A

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NOTE

The information is based upon existing land-use authority and planning around the INEL Site. The INEL Site is located on Federal land that has been withdrawn from public use. Public access to the INEL Site is primarily limited to two Federal highways and three State highways. Other roads within the INEL are restricted to INEL personnel and visitors on official business and are patrolled by onsite security personnel. Public access will be restricted as long as the INEL Site is withdrawn from public domain.

Table A-1. USE FOR LAND PLANS SURROUNDING THE INEL

<u>Organization</u>	<u>Land Use Plans</u>
U.S. Forest Service (USFS)	The USFS does not have direct contact with the INEL Site (1 mile removed). There is no timber activity around the area. There is some trail erosion prevention 9 miles north of the Site. There is some hunting activity but little use.
Idaho Department of Fish and Game (F&G)	The only F&G involvement is with hunters who enter one-half mile within the INEL Site boundary.
Idaho Department of Lands (IDL)	IDL activities involve only cattle grazing. There will be no residential activity under IDL jurisdiction.
Idaho Crop Improvement Association	There are no crop improvement activities onsite.
U.S. Department of Agriculture (USDA)	There are no activities onsite.
U.S. Fish and Wildlife (USFW)	There are no fish and wildlife activities around the INEL. The closest area is about 20 miles.
Idaho Cattleman's Association	The only foreseeable use is grazing. There will be no building except for the moving of water troughs. Grazing of cattle on the INEL Site is limited to areas near the southwestern boundaries and is controlled by annual allotment.
University of Idaho Experimental Sheep Station	Ten acres are leased within the INEL Site. The Sheep Station does not have any land-use plans for the area. they use the area as a holding place from October to May.

Table A-1 (continued)

<u>Organization</u>	<u>Land Use Plans</u>
Idaho Historical Preservation Office (IHPO)	The IHPO reviews reports submitted by the INEL archaeologist.
U.S. Bureau of Land Management (BLM)	The BLM manages land outside the INEL Site boundary. These lands are managed for multiple use including grazing and recreation. The present management plan will be updated in approximately 3 years.
Idaho Department of Agriculture Soil Conservation Service (IDASCS)	All services in Bonneville, Jefferson, Butte, Clark, and Bingham Counties work to prevent erosion. The IDASCS works with ranchers and farmers to meet the provisions of the Food Security Act of 1985. Chemicals or pesticides may be used in areas where pests are abundant. The service also maintains range resources. Activities such as spraying depend upon request. West Bonneville County is a lava desert. The 1961 mineral survey deemed spraying economically unfeasible.

COUNTIES

Bonneville	No prospect of growth. No residential or farm potential around the INEL Site boundary. The Bonneville/INEL interface is considered agricultural, which means land is used for grazing, farming, livestock, dairying, pasturage, cultivation, or animal husbandry. Unused, wooded, floodable, or other marginal areas may be included. The land owned by the government is also classified as open space and contains limited timber, minerals, dry farming, and recreation.
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Table A-1 (continued)

<u>Organization</u>	<u>Land Use Plans</u>
Jefferson	Practically all of the Federally-controlled land (48.8 % of the County) is classified and used as rangeland or barren land. Areas bordering the east INEL Site boundary consist of agricultural cropland (land used for grazing, farming, livestock, dairying, pasturage, cultivation, or animal husbandry, unused, wooded, floodable, or other marginal areas) and rangeland (where animals roam and feed).
Bingham	The area south of the site is considered natural resource, land and/or water in a natural, unimproved state including that which may be growing on it or found in it. It may include, but is not limited to, mineral deposits, timber, rangeland, watersheds, recreation areas and wildlife habitat. Land further south of the INEL Site is classified as multiple use.
Butte	The west boundary of the INEL Site is controlled by the BLM and is used for rangeland. Beyond the border is also rangeland with agricultural activities near Howe.
Clark	Clark County has no land-use plans or map for the INEL vicinity.

SOURCES OF INFORMATION FOR LAND USE PLANS^a

Forest Service: Keith Tweedy (Dubois), 374-5422

Idaho Department of Fish and Game:

Justin Naderman (Idaho Falls), 525-7290

Idaho Department of Lands:

Mr. Benedict or Bob Brammer (Idaho Falls), 523-5398

Idaho Crop Improvement Association:

Dr. Clark (Idaho Falls), 522-9198

U.S. Department of Agriculture:

W. G. Nielson (Boise), 334-3521

Idaho Cattlemen's Association:

(Boise), 343-1615; and
Bob Waddoups (Arco), 527-8242

University of Idaho Experimental Sheep Station:

Sharon Weller (Dubois), 374-5306

U.S. Bureau of Land Management:

LeRoy Cook (Idaho Falls), 524-7500

U.S. Fish and Wildlife:

Jack Richardson (Hamer), 662-5423

Idaho Historical Preservation Office:

Glenda King (Boise), 334-3847

^a The area code for all telephone numbers listed is (208).

Soil Conservation Service (Counties):

Bonneville:	Dennis Hadley, 522-5137
Jefferson:	Ken Beckman, 745-6662
	Mudlake: Ms. Lacasio, 663-4463
Butte:	Dan Holden, 527-8557
Clark:	Lloyd Bradshaw, 356-3218
Bingham:	785-6505

County Planning and Zoning:

Bonneville:	Alonzo Zaugg, 529-1386
Jefferson:	745-9222
Butte:	Judy Bailey, 527-3021
Clark:	Dan Lucas, 374-5304
Bingham:	Neil Morgan, 785-5005, ext. 278

^a The area code for all telephone numbers listed is (208).

Agricultural Cropland: Land used for growing, harvesting, livestock, dairying, pasturage, cultivation, or animal husbandry. Unirrigated, wooded, floodable, or other marginal areas.

Rangeland: Open rangelands, cropland, and forest.

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JEFFERSON COUNTY IDAHO LAND USE

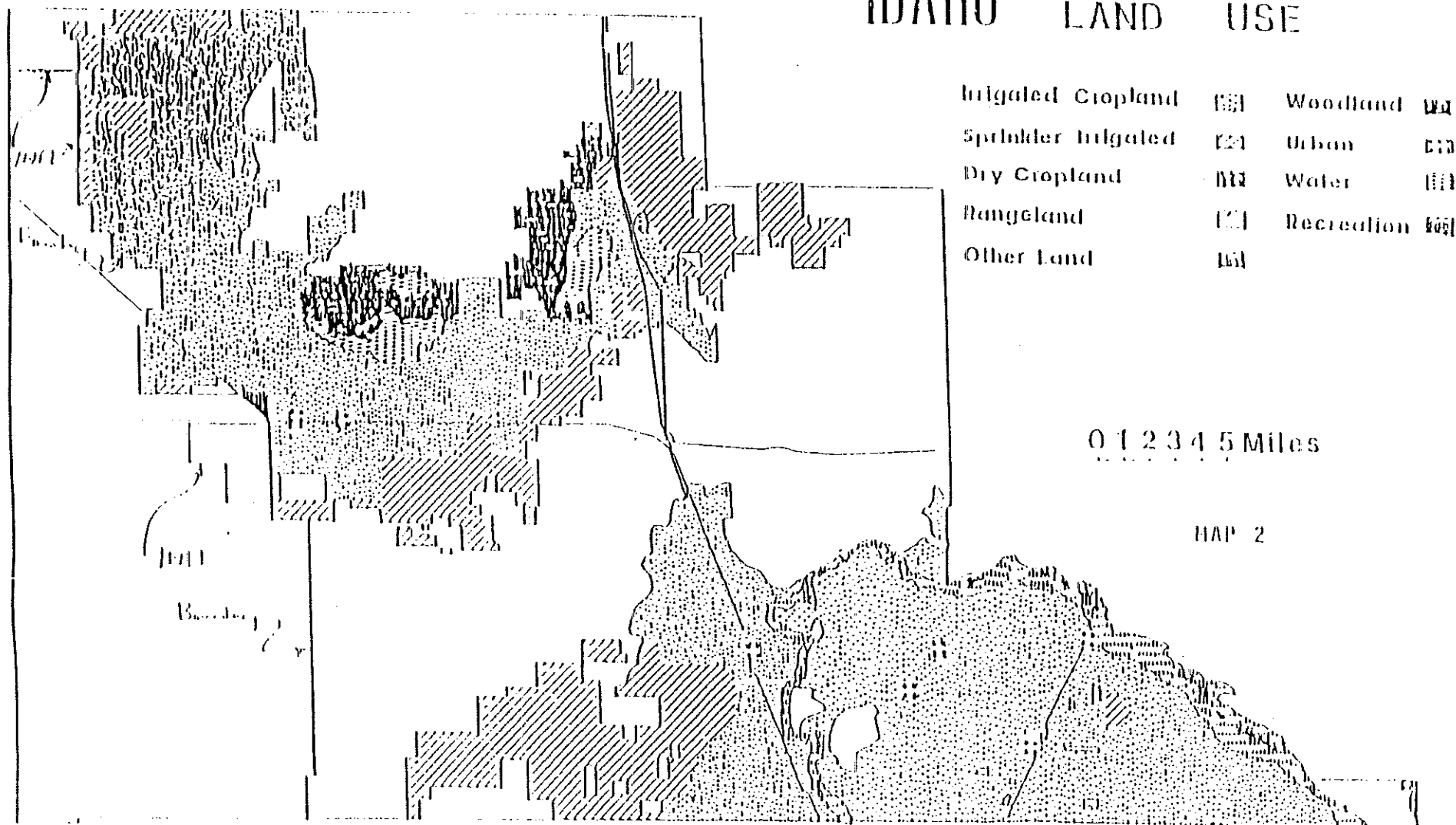


Figure A-1. Jefferson County Land Use.

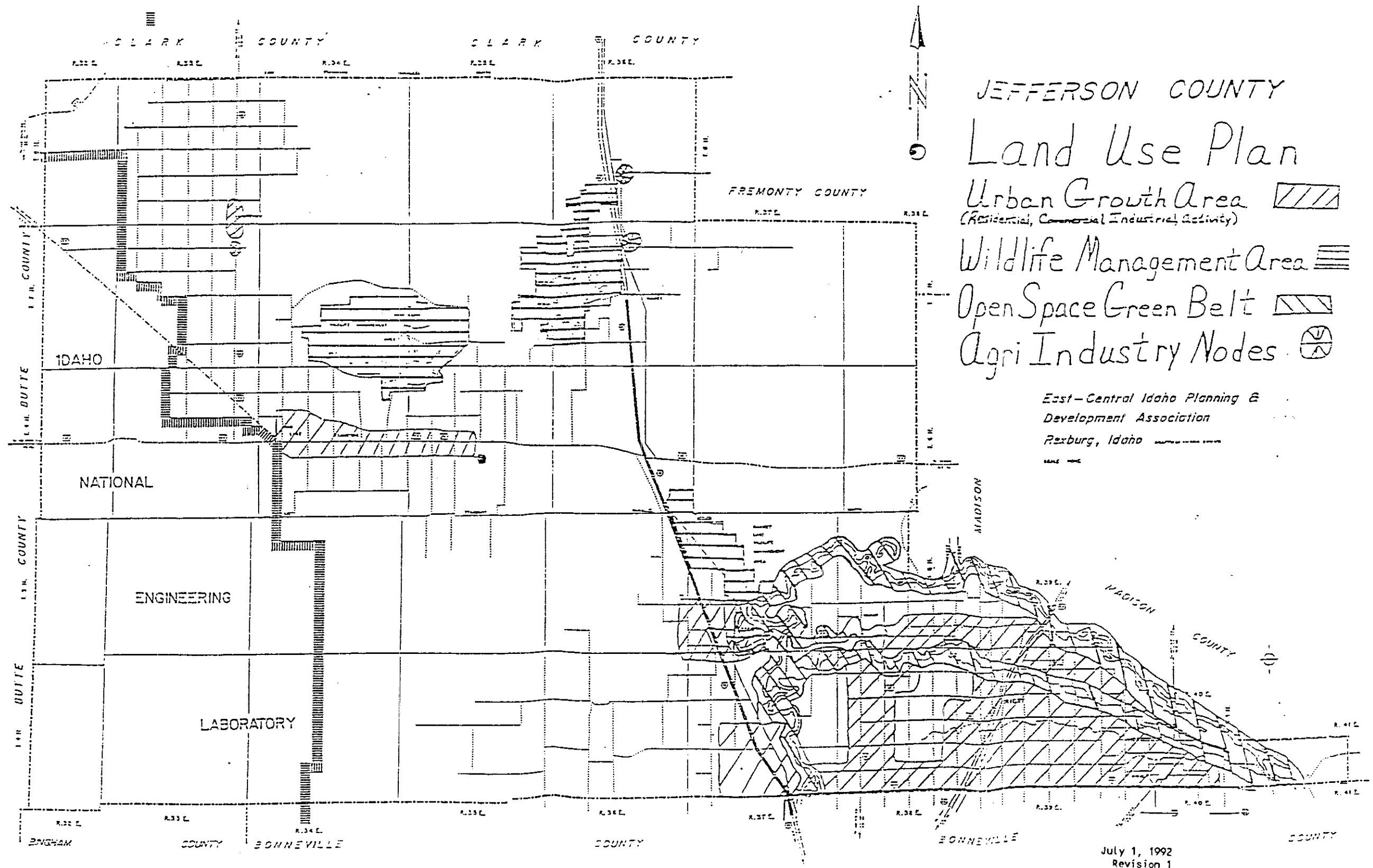


Figure A-2. Jefferson County Land Use.

Natural Resources: Land and/or water in a natural, unimproved state including that which may be growing on it or found in it; it may include, but are not limited to, mineral deposits, timber, rangeland, watersheds, recreation areas and wildlife habitat.

Multiple use: The multiple purpose for which land or a building is designated, arranged, intended or for which it is or may be occupied or maintained.

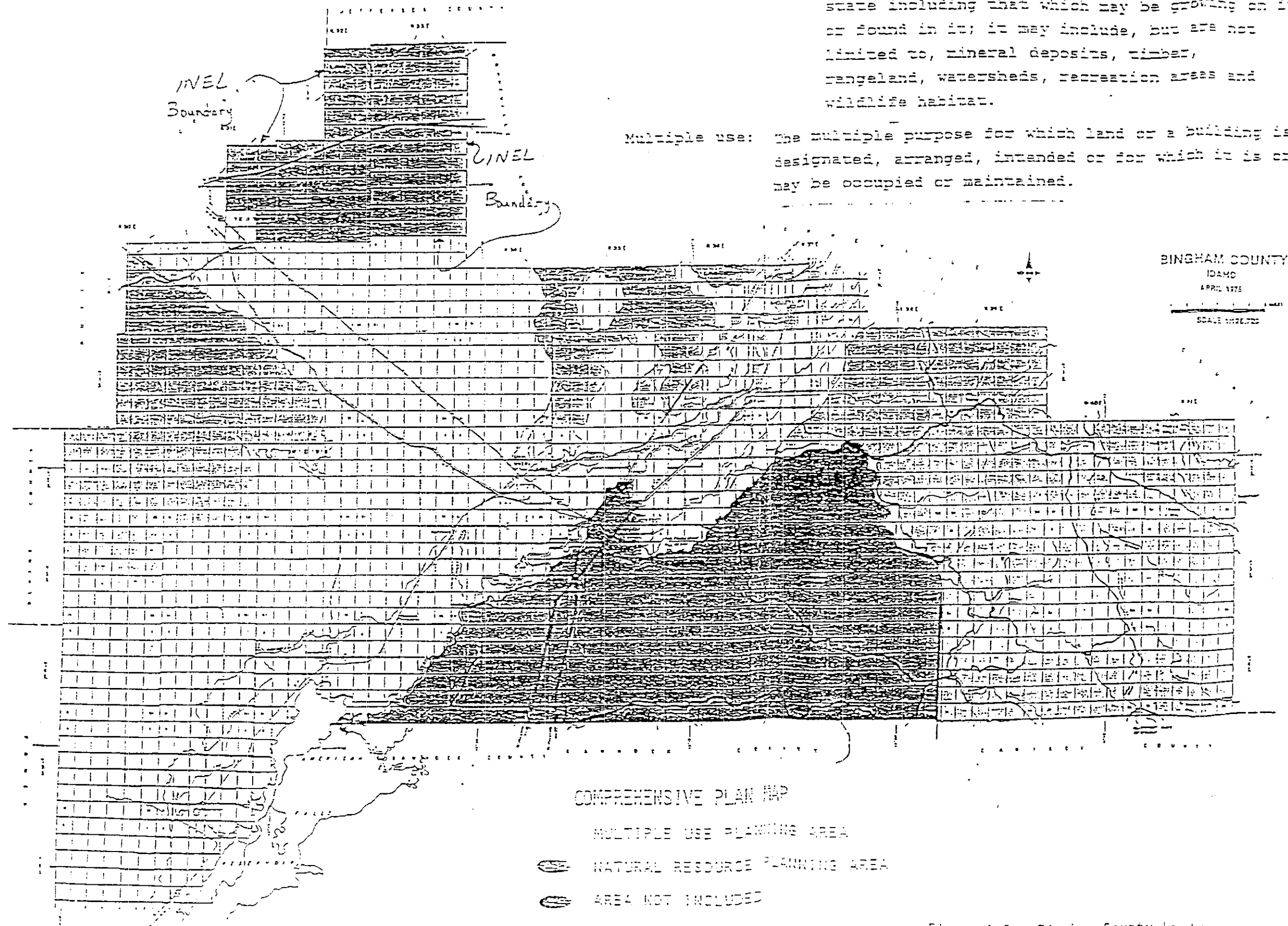


Figure A-3. Bingham County Land Use.

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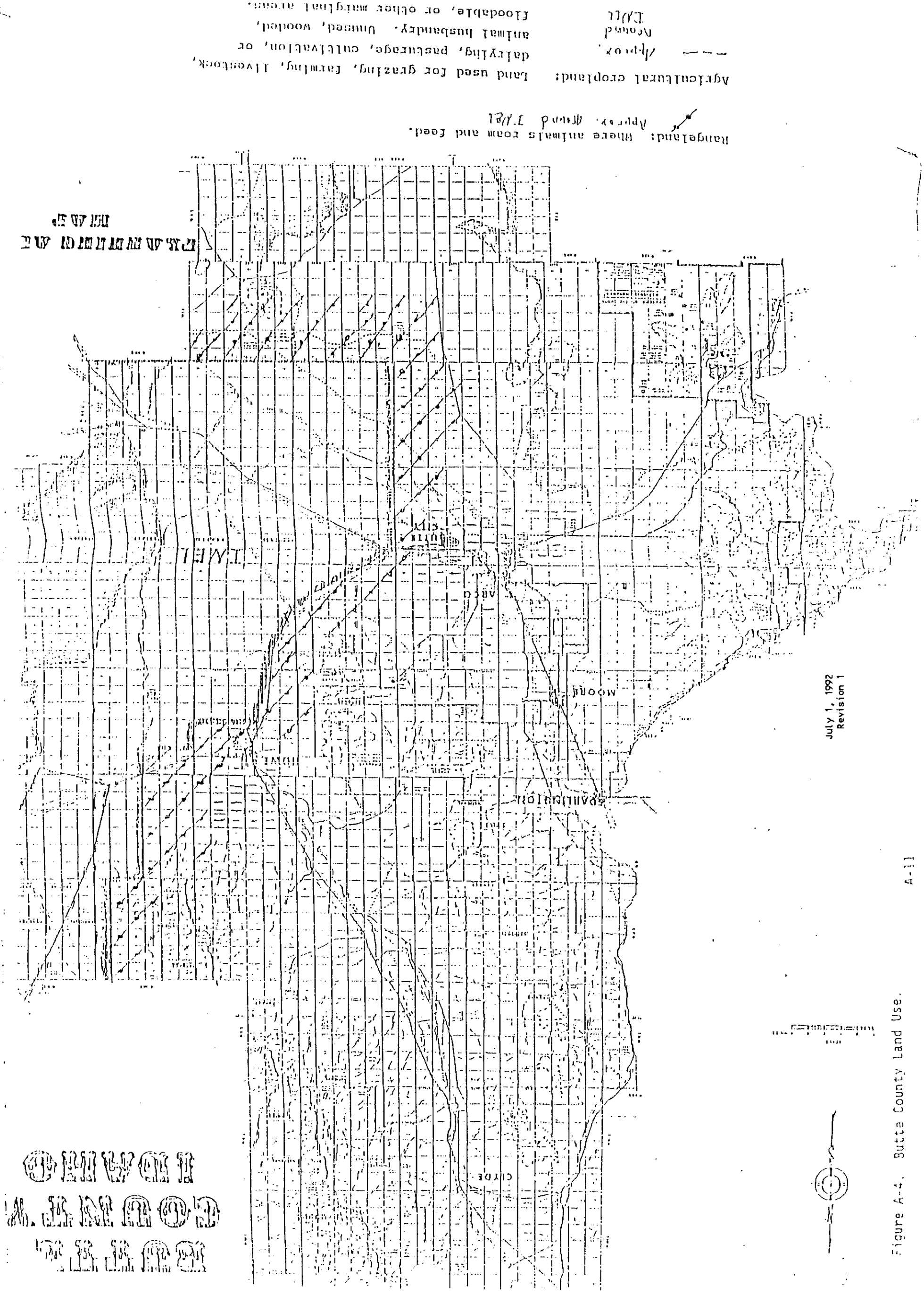


Figure A-4. Butte County Land Use.